

C 1

21. (Twice Amended) A process for reducing evaporation of a minute droplet of an aqueous solution comprising the steps of:

providing a planar substrate;

providing an oily liquid layer;

providing an aqueous solution immiscible with said oily layer; and

shooting a minute droplet of said aqueous solution into said oily liquid layer to contact said planar substrate,

wherein said oily liquid layer surrounds all surfaces of said minute droplet of aqueous solution that are not in contact with said planar substrate whereby evaporation is reduced.

C 2

29. (Amended) ~~The process of claim 21 further comprising providing a covering over said oily liquid layer.~~

C 3

32. (Twice Amended) The process of claim 21 further comprising providing a second aqueous solution into said oily liquid layer adjacent to said minute droplet of said aqueous solution wherein said second aqueous solution does not contact said minute droplet of said aqueous solution.

33. (Twice Amended) A process for reducing evaporation of a minute droplet of an aqueous solution comprising the steps of:

providing a planar substrate;

providing an oily liquid layer;

providing an aqueous solution immiscible with said oily liquid layer;

shooting a minute droplet of said aqueous solution into said oily liquid layer to

~~contact said planar substrate, and
providing a covering in contact with said minute droplet of said aqueous solution,
wherein said oily liquid layer surrounds all surfaces of said minute droplet of said
aqueous solution that are not in contact with said planar substrate and said covering
whereby evaporation is reduced.~~

- C3
34. (Twice Amended) A process for conducting a reaction in a minute droplet of an aqueous solution protected from evaporation comprising the steps of:
providing a planar substrate;
providing an oily liquid layer;
providing an aqueous solution immiscible with said oily liquid layer;
shooting a minute droplet of said aqueous solution into said oily liquid layer to contact said planar substrate;
providing a covering in contact with said oily liquid layer;
wherein said oily liquid layer surrounds all surfaces of said minute droplet of said aqueous solution [minute aqueous droplet] that are not in contact with said contact surface of said planar substrate;
providing to said protected minute droplet a reactant; and conducting a reaction in said produced minute droplet with said reactant whereby evaporation is reduced.

- C4
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36. (Twice Amended) The process of claim 34 wherein said minute droplet of said aqueous solution comprises DNA.

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37. (Amended) The process of claim 34 wherein the contact surface between said planar substrate and said minute droplet of said aqueous solution comprises an enzyme

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C4

cont

adsorption preventing agent.

38. (Amended) The process of claim 34 wherein the contact surface between said planar substrate and said minute droplet of said aqueous solution comprises a bovine serum albumin coating.
39. (Amended) The process of claim 34 wherein said oily liquid layer has a thickness of about 100 μm or less.

Please add the following new claim:

- C5*
40. (new) A process for conducting a reaction in a minute droplet of an aqueous solution protected from evaporation at a high temperature comprising the steps of:
providing a planar substrate;
providing an oily liquid layer;
providing a minute droplet of an aqueous solution immiscible with said oily liquid layer to contact said substrate,
providing a covering in contact with said oily liquid layer,
wherein said oily liquid layer surrounds all surfaces of said minute droplet of an aqueous solution that are not in contact with said contact surface of said planar substrate;
providing to said protected minute droplet a reactant; and
conducting a reaction in said protected minute droplet with said reactant whereby evaporation is reduced.